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OCT 25 2006

IN THE CLAIMS:

1. (Currently Amended) A plasma display device comprising:

a panel unit having a first electrode, a second electrode, and a third electrode, the third electrode intersecting the first and second electrodes to define a discharge cell; and

a drive unit for driving the panel with a write period and a sustain period, and during the sustain period, applying a first voltage of predetermined duration to the first electrode[[,]] and the second electrode, and a second voltage of predetermined duration to the third electrode, so as to generate a sustain discharge between the first and second electrodes in the sustain period

the second voltage applied to the third electrode changing in potential within the duration of the first voltage applied to the first electrode.

2. (Currently Amended) The plasma display ~~panel~~ device of claim 1, wherein the change in the potential of the third electrode is a decrease from a potential V1 to a potential V2.

3. (Currently Amended) The plasma display ~~panel~~ device of claim 2, wherein the drive unit increases the potential of the third electrode from a potential V0 to the potential V1.

4. (Currently Amended) The plasma display ~~panel~~ device of claim 3, wherein the potentials V0 and V2 are equal.

5. (Currently Amended) The plasma display ~~panel~~ device of claim 3, wherein the potentials V0 and V2 are set in a range that will not cause discharge to occur between the third electrode and the first electrode or second electrode.

6. (Currently Amended) The plasma display ~~panel~~ device of claim 1, wherein

a waveform of the second voltage applied to the third electrode is a pulse waveform, and

the change in potential of the third electrode corresponds to a fall in the pulse waveform.

7. (Currently Amended) A plasma display device, comprising:

a panel unit having a first electrode, a second electrode, and a third electrode, the third electrode intersecting the first and second electrodes to define a discharge cell; and

a drive unit that drives the panel unit using a drive method having a write period and a sustain period, by applying, in the sustain period a second voltage to the third electrode and a first voltage to the first electrode and second electrode so as to generate a sustain discharge between the first and second electrodes in the sustain period, the drive unit changing potential of the third electrode in a period equal to 80% of a time constant of the sustain discharge.

8. (Currently Amended) The plasma display ~~panel~~ device of claim 1, wherein

the first electrode and second electrode is provided on a first substrate, and

the third electrode is provided on a second substrate that is disposed facing the first substrate across a discharge space.

9. (Currently Amended) The plasma display ~~panel~~ device of claim 8, wherein one of the first and second electrodes is a scan electrode, the other electrode is a sustain electrode, and the third electrode is a data electrode.

10. (Currently Amended) The plasma display device of claim 1, wherein a waveform of the first voltage applied to the first electrode and second electrode in the sustain period has a slope requiring a duration T to at least one of rise and fall.

11. (Currently Amended) The plasma display ~~panel~~ device of claim 10, wherein T is in a range having a width of ±20% with respect to a reference value in a range of 250 nsec to 800 nsec.

12. (Currently Amended) The plasma display ~~panel~~ device of claim 11, wherein the reference value of T is in a range of 250 nsec to 500 nsec.

13. (Currently Amended) The plasma display device of claim 7, wherein ~~the voltage~~ a waveform of the first voltage applied to the first electrode and second electrode in the sustain period is a pulse waveform that alternates repeatedly between high and low potentials, the high periods being of equal duration to the low periods, and the change in the potential of the third electrode occurs in a range of T - 0.15 μsec to T + 0.25 μsec after the ~~voltage~~ waveform of the first voltage applied to at least one of the first and second electrode begins to change.

14. (Currently Amended) The plasma display ~~panel~~ device of claim 13, wherein the change in the potential of the third electrode from V1 to V2 occurs in a range of T - 0.05 μsec to T + 0.15 μsec after the ~~voltage~~ waveform of the first voltage applied to at least one of the first electrode and second electrode begins to change.

15. (Currently Amended) The plasma display ~~panel~~ device of claim 13, wherein the potential of the third electrode decreases from a potential V1 to a potential V2 in the range.

16. (Currently Amended) The plasma display ~~panel~~ device of claim 13, wherein the ~~voltage~~ waveform of the first voltage applied to the first electrode is out of phase with the ~~voltage~~ waveform of the first voltage applied to the second electrode by a half cycle.

17. (Currently Amended) The plasma display device of claim 7, wherein the ~~voltage~~ waveform of the first voltage applied to the first electrode and second electrode in the sustain period is a pulse waveform that alternates repeatedly between high and low potentials, the high periods being longer than the low periods, and the change in the potential of the third electrode occurs in a range of T - 0.25 μsec to T + 0.25 μsec after the ~~voltage~~ waveform of the first voltage applied to at least one of the first electrode and second electrode begins to change.

18. (Currently Amended) The plasma display ~~panel~~ device of claim 17, wherein the change in the potential of the third electrode from V1 to V2 occurs in a range of T - 0.15 μsec to T + 0.05 μsec after the ~~voltage~~ waveform of the first voltage applied to at least one of the first electrode and second electrode begins to change.

19. (Previously Presented) The plasma display device of claim 17, wherein the potential of the third electrode decreases from a potential V1 to a potential V2 in the range.

20. (Currently Amended) The plasma display device of claim 17, wherein the ~~voltage~~ waveform of the first voltage applied to the first electrode is out of phase with the ~~voltage~~ waveform of the first voltage applied to the second electrode by a half cycle.

21. (Currently Amended) The plasma display device of claim 7, wherein

the ~~voltage~~ waveform of the first voltage applied to the first electrode and second electrode in the sustain period is a pulse waveform that alternates repeatedly between high and low potentials, the high periods being shorter than the low periods, and

the change in the potential of the third electrode occurs in a range of (i) T - 0.05 μsec to T + 0.35 μsec after the ~~voltage~~ waveform of the first voltage applied to at least one of the first and second electrode begins to rise, or (ii) T - 0.45 μsec to T - 0.05 μsec after the ~~voltage~~ waveform of the first voltage applied to at least one of the first and second electrode begins to fall.

22. (Currently Amended) The plasma display ~~panel~~ device of claim 21, wherein

the change in the potential of the third electrode from V1 to V2 occurs in a range of (i) T + 0.05 μsec to T + 0.25 μsec after the ~~voltage~~ waveform of the first voltage applied to at least one of the first and second electrode begins to rise, or (ii) T - 0.35 μsec to T - 0.15 μsec after the ~~voltage~~ waveform of the first voltage applied to at least one of the first electrode and second electrode begins to fall.

23. (Currently Amended) The plasma display ~~panel~~ device of claim 21, wherein the potential of the third electrode decreases from a potential V1 to a potential V2 in the range.

24. (Currently Amended) The plasma display ~~panel~~ device of claim 21, wherein the ~~voltage~~ waveform of the first voltage applied to the first electrode is out of phase with the ~~voltage~~ waveform of the first voltage applied to the second electrode by a half cycle.

25. (Currently Amended) A plasma display device, comprising:

a panel unit having a first electrode, a second electrode, and a third electrode, the third electrode intersecting the first and second electrode to define a discharge cell; and

a drive unit that drives the panel unit with a write period and a sustain period, and during the sustain period applies, a first voltage of a predetermined duration to the first electrode[[,]] and second electrodes and a second voltage of a predetermined duration to the third electrode, so as to generate a sustain discharge between the first and second electrodes in the sustain period, and the drive unit changing the potential of the third electrode within the duration of the first voltage applied to the first electrode, by changing from V0 to V1 prior to the sustain discharge, and from V1 to V2 after the sustain discharge, the potentials V0, V1 and V2 being set so that V1 > V0 and V1 > V2, or V0 > V1 and V2 > V1.

26. (Previously Presented) The plasma display device of claim 25, wherein

the drive unit increases the potential of the third electrode from V0 to V1 prior to a first sustain discharge, sustains the potential V1, and decreases the potential of the third electrode from V1 to V2 after a second sustain discharge that is subsequent to the first sustain discharge.

27. (Previously Presented) The plasma display device of claim 25, wherein the drive unit decreases the potential of the third electrode from V0 to V1 prior to a first sustain discharge, sustains the potential V1, and increases the potential of the third electrode from V1 to V2 after a second sustain discharge that is subsequent to the first sustain discharge.

28. (Previously Presented) The plasma display device of claim 25, wherein one of the first electrode and second electrode is a scan electrode, the other electrode is a sustain electrode, and the third electrode is a data electrode.

29. (Currently Amended) The plasma display device of claim 25, wherein a cycle of a waveform of the second voltage ~~waveform~~ applied to the third electrode in the sustain period is an integer multiple of a cycle of a waveform of the first voltage ~~waveform~~ applied to the first electrode and second electrode.

30. (Previously Presented) The plasma display device of claim 29, wherein one of the first electrode and second electrode is a scan electrode, the other electrode is a sustain electrode, and the third electrode is a data electrode.

31. (Previously Presented) The plasma display device of claim 25, wherein binding capacity of the first electrode with the third electrode is different from binding capacity of the second electrode with the third electrode, and the drive unit increases the potential of the third electrode when a potential of the first electrode or second electrode with the greater binding capacity is high.

32. (Previously Presented) The plasma display device of claim 31, wherein one of the first electrode and second electrode is a scan electrode, the other electrode is a sustain electrode, and the third electrode is a data electrode.

33. (Currently Amended) A plasma display device, comprising:

a panel unit having a first electrode, a second electrode, and a third electrode, the third electrode intersecting the first and second electrode to define a discharge cell; and

a drive unit that drives the panel unit using a drive method having a write period and a sustain period, by applying, in the sustain period, a second voltage of a predetermined duration to the third electrode and a first voltage of a predetermined duration to the first electrode and second electrode, so as to generate a sustain discharge between the first and second electrodes in the sustain period, the drive unit comprising :

a detection subunit operable to detect a brightness average of an image for display by the panel unit and temperature of the panel unit; and

a control subunit operable to perform a control in the sustain period to change potential of the third electrode according to the detected brightness average and temperature.

34-35. (Cancelled)

36. (Currently Amended) The plasma display device of claim 33, wherein

a waveform of the second voltage applied to the third electrode in the sustain period is a pulse waveform; and

the change in the potential of the third electrode during the sustain discharge corresponds to a fall in the pulse waveform.

37. (Currently Amended) The plasma display device of claim 33, wherein ~~the voltage~~ a waveform of the second voltage applied to the third electrode in the sustain period is in synchronization with ~~the voltage~~ a waveform of the first voltage applied to the first and second electrodes.

38. (Currently Amended) The plasma display device of claim 33, wherein the control by the control subunit is conducted at a fall time of the ~~voltage~~ waveform of the second voltage applied to the third electrode in the sustain period.

39. (Currently Amended) A plasma display device, comprising:

a panel unit having a first electrode, a second electrode, and a third electrode, the third electrode intersecting the first and second electrodes to define a discharge cell; and

a drive unit that drives the panel unit with a write period and a sustain period, and during the sustain period, applying a first voltage of a predetermined duration to the first electrode[[,]] and the second electrodes and a second voltage of a predetermined duration to the third electrode, so as to generate a sustain discharge between the first and second electrodes in the sustain period, and

in the sustain period, the drive unit changes the potential of the third electrode within the duration of the first voltage applied to the first electrode so as to hasten generation of the sustain discharge in comparison to when the potential is not changed.

40. (Currently Amended) A plasma display device, comprising:

a panel unit having a first [[a]] substrate and a second substrate that face each other across a discharge space, a first electrode and a second electrode being provided on the first

substrate, and a phosphor layer and a third electrode that intersects the first electrode and second electrode to define a discharge cell, on the second substrate ; and

a drive unit that drives the panel unit with a write period and a sustain period, and during the sustain period applies a first voltage of a predetermined duration to the first[[,]] and second electrodes and a second voltage of a predetermined duration to the third electrode, so as to generate a sustain discharge between the first and second electrodes in the sustain period, and in the sustain period, the drive unit changes the potential of the third electrode within the duration of the first voltage applied to the first electrode so as to shift a region in which the sustain discharge is generated closer to the phosphor layer in comparison to when the potential is not changed.

41. (Currently Amended) A plasma display device, comprising:

a panel unit having a first electrode, a second electrode, and a third electrode, the third electrode intersecting the first and second electrodes to define a discharge cell; and

a drive unit that drives the panel unit with a write period and a sustain period, and during the sustain period applies a first voltage ~~signals~~ of a predetermined duration to the first[[,]] and second electrodes and a second voltage of a predetermined duration to the third electrode, so as to generate a sustain discharge between the first and second electrodes in the sustain period, and in the sustain period, the drive unit changes the potential of the third electrode within the duration of the first voltage applied to the first electrode so as to shift a discharge path of the sustain discharge closer to the third electrode in comparison to when the potential is not changed.

42. (Currently Amended) A plasma display device, comprising:

a panel unit having a first electrode a second electrode, and a third electrode, the third electrode intersecting the first and second electrodes to define a discharge cell; and

a drive unit that drives the panel unit with a write period and a sustain period, and during the sustain period applies a first voltage of a predetermined duration to the first electrode[[,]] and the second electrode and a second voltage of a predetermined duration to the third electrode, so as to generate a sustain discharge between the first and second electrodes in the sustain period, and in the sustain period, the drive unit changes the potential of the third electrode within the duration of the first voltage applied to the first electrode so as to lengthen a discharge path of the sustain discharge in comparison to when the potential is not changed.

43. (Currently Amended) A method for driving a plasma display device that includes (i) a panel unit having a first electrode, a second electrode, and a third electrode, the third electrode intersecting the first and second electrodes to define a discharge cell, and (ii) a drive unit that drives the panel unit ~~using the steps of the method~~ comprising:

applying a write voltage in a write step and a sustain voltage of predetermined duration to the first and second electrodes in a sustain step; and

changing potential of [[the]] a sustain voltage applied to the third electrode during the duration of the sustain voltage applied to the first electrode.

44. (Previously Presented) The drive method of claim 43, wherein the change in the potential of the third electrode is a decrease from a potential V1 to a potential V2.

45. (Previously Presented) The drive method of claim 44, wherein the drive unit increases the potential of the third electrode from a potential V0 to the potential V1.

46. (Original) The drive method of claim 45, wherein the potentials V0 and V2 are equal.

47. (Original) The drive method of claim 45, wherein the potentials V0 and V2 are set in a range that will not cause a discharge to occur between the third electrode and the first or second electrode.

48. (Currently Amended) The drive method of claim 43, wherein a waveform of the second voltage applied to the third electrode is a pulse waveform, and the change in the potential of the third electrode corresponds to a fall in the pulse waveform.

49. (Currently Amended) A drive method for a plasma display device having a panel with a first, second and third electrode, the third electrode intersecting the first and second electrodes to define a discharge cell, ~~the steps of the method~~ comprising:

applying a write voltage in a write step and a sustain voltage to respective first and second electrodes so as to generate a sustain discharge between the first and second electrodes in a sustain step; and

during the sustain discharge, changing potential of [[the]] a sustain voltage applied to the third electrode in a period equal to 80% of a time constant of the sustain discharge.

50. (Currently Amended) The drive method of claim 49, wherein

a waveform of the sustain voltage applied to the first and second electrode has a slope requiring a duration T to at least one of rise and fall.

51. (Original) The drive method of claim 50, wherein T is in a range having a width of ±20% with respect to a reference value in a range of 250 nsec to 800 nsec.

52. (Original) The drive method of claim 51, wherein the reference value of T is in a range of 250 nsec to 500 nsec.

53. (Currently Amended) The drive method of claim 50, wherein

the sustain voltage waveform applied to the first electrode and second electrode is a pulse waveform that alternates repeatedly between high and low potentials, the high periods being of equal duration to the low periods, and

the change in the potential of the third electrode occurs in a range of T - 0.15 μsec to T + 0.25 μsec after the sustain voltage waveform applied to at least one of the first and second electrodes begins to change.

54. (Currently Amended) The drive method of claim 53, wherein the change in the potential of the third electrode from V1 to V2 occurs in a range of T - 0.05 μsec to T + 0.15 μsec after the sustain voltage waveform applied to at least one of the first and second electrode begins to change.

55. (Original) The drive method of claim 53, wherein the potential of the third electrode decreases from a potential V1 to a potential V2 in the range.

56. (Currently Amended) The drive method of claim 53, wherein the sustain voltage waveform applied to the first electrode is out of phase with the sustain voltage waveform applied to the second electrode by a half cycle.

57. (Currently Amended) The drive method of claim 50, wherein

the sustain voltage waveform applied to the first electrode and second electrode is a pulse waveform that alternates repeatedly between high and low potentials, the high periods being longer than the low periods, and

the change in the potential of the third electrode occurs in a range of T - 0.25 μsec to T + 0.25 μsec after the voltage waveform applied to at least one of the first and second electrodes begins to change.

58. (Currently Amended) The drive method of claim 57, wherein

the change in the potential of the third electrode from V1 to V2 occurs in a range of T - 0.15 μsec to T + 0.05 μsec after the sustain voltage waveform applied to at least one of the first and second electrodes begins to change.

59. (Original) The drive method of claim 57, wherein the potential of the third electrode decreases from a potential V1 to a potential V2 in the range.

60. (Currently Amended) The drive method of claim 57, wherein the sustain voltage waveform applied to the first electrode is out of phase with the sustain voltage waveform applied to the second electrode by a half cycle.

61. (Currently Amended) The drive method of claim 50, wherein

the sustain voltage waveform applied to the first electrode and second electrode is a pulse waveform that alternates repeatedly between high and low potentials, the high periods being shorter than the low periods, and the change in the potential of the third electrode occurs in a range of (i) T - 0.05 μsec to T + 0.35 μsec after the sustain voltage waveform applied to at least

one of the first and second electrodes begins to rise, or (ii) T - 0.45 μsec to T - 0.05 μsec after the sustain voltage waveform applied to at least one of the first and second electrodes begins to fall.

62. (Previously Presented) The drive method of claim 61, wherein the change in the potential of the third electrode from V1 to V2 occurs in a range of (i) T + 0.05 μsec to T + 0.25 μsec after the sustain voltage waveform applied to at least one of the first and second electrodes begins to rise, or (ii) T - 0.35 μsec to T - 0.15 μsec after the sustain voltage waveform applied to at least one of the first and second electrodes begins to fall.

63. (Original) The drive method of claim 61, wherein the potential of the third electrode decreases from a potential V1 to a potential V2 in the range.

64. (Currently Amended) The drive method of claim 61, wherein the sustain voltage waveform applied to the first electrode is out of phase with the sustain voltage waveform applied to the second electrode by a half cycle.

65. (Currently Amended) A drive method for a plasma display device having a panel with a first electrode, a second electrode, and a third electrode, the third electrode intersecting the first electrode and second electrode to define a discharge cell, ~~the steps of the method~~ comprising:

applying a write voltage in a write step and a sustain voltage to the respective first electrode and second electrode in a sustain step, so as to generate a sustain discharge between the first and second electrodes, and

during the sustain discharge, changing a potential of [[the]] a sustain voltage applied to the third electrode within the duration of the sustain voltage applied to the first

electrode, by changing from V0 to V1 prior to the sustain discharge, and from V1 to V2 after the sustain discharge, and the potentials V0, V1 and V2 are set so that V1 > V0 and V1 > V2, or V0 > V1 and V2 > V1.

66. (Previously Presented) The drive method of claim 65, wherein the potential of the third electrode is increased from V0 to V1 prior to a first sustain discharge, the potential V1 sustained, and the potential of the third electrode is decreased from V1 to V2 after a second sustain discharge that is subsequent to the first sustain discharge.

67. (Previously Presented) The drive method of claim 66, wherein the potential of the third electrode is decreased from V0 to V1 prior to a first sustain discharge, the potential V1 sustained, and the potential of the third electrode is increased from V1 to V2 after a second sustain discharge that is subsequent to the first sustain discharge.

68. (Previously Presented) The drive method of claim 65, wherein a cycle of the voltage waveform applied to the third electrode is an integer multiple of a cycle of the voltage waveform applied to the first and second electrode.

69. (Previously Presented) The drive method of claim 65, wherein binding capacity of the first electrode with the third electrode is different from binding capacity of the second electrode with the third electrode, and the potential of the third electrode is increased when potential of the first electrode and the second electrode with the greater binding capacity is high.

70. (Currently Amended) A drive method for a plasma display device having a panel unit a first electrode, a second electrode, and a third electrode, the third electrode intersecting the

first electrode and second electrode to define a discharge cell, ~~the steps of the method~~ comprising:

applying in a sustain step a second voltage of a predetermined duration to the third electrode and a first voltage of a predetermined duration to the first electrode and second electrode, so as to generate a sustain discharge between the first and second electrodes;

detecting a brightness ~~voltage~~ average of the image to be displayed by the panel unit and [[the]] a temperature of the panel unit; and

changing ~~potential of~~ the second voltage the third electrode according to the detected brightness average and temperature.

71-72. (Cancelled)

73. (Currently Amended) The drive method of claim 70, wherein

a waveform of the second voltage applied to the third electrode is a pulse waveform; and

the change in the potential of the third electrode corresponds to a fall in the pulse waveform.

74. (Currently Amended) The drive method of claim 70, wherein the ~~voltage~~ waveform of the second voltage applied to the third electrode is in synchronization with the ~~voltage~~ waveform of the first voltage applied to the first electrode and second electrode.

75. (Currently Amended) The drive method of claim 70, wherein the potential of the third electrode is changed at a fall time of the second voltage waveform applied to the third electrode.

76. (Currently Amended) A drive method for a plasma display device having a panel unit with a first electrode, a second electrode, and a third electrode, the third electrode intersecting the first and second electrodes to define a discharge cell, ~~the steps of the method~~ comprising:

applying in a sustain step a second voltage of a predetermined duration to the third electrode and a first voltage of a predetermined duration to the first and second electrodes so as to generate a sustain discharge between the first and second electrodes; and

changing ~~potential of~~ the second voltage applied to the third electrode in the sustain step during the duration of the first voltage applied to the first electrode so as to hasten the generation of the sustain discharge in comparison to when the ~~potential~~ second voltage is not changed.

77. (Currently Amended) A drive method for a plasma display device having a panel unit with a first electrode, a second electrode, and a third electrode, the third electrode intersecting the first and second electrodes to define a discharge cell, and a phosphor layer disposed over the third electrode, ~~the steps of the method~~ comprising:

applying in a sustain step a second voltage of a predetermined duration to the third electrode and a first voltage of a predetermined duration to the first electrode and the second electrode, so as to generate a sustain discharge between the first and second electrodes ; and

changing ~~potential of~~ the second voltage applied to the third electrode in the sustain step during the duration of the first voltage applied to the first electrode so as to shift a

region in which the sustain discharge is generated closer to the phosphor layer in comparison to when the ~~potential~~ second voltage is not changed.

78. (Currently Amended) A drive method for a plasma display device having a panel unit with a first electrode, a second electrode and a third electrode, the third electrode intersecting the first and second electrodes to define a discharge cell, ~~the steps of the method~~ comprising:

applying in a sustain step a second voltage of a predetermined duration to the third electrode and a first voltage of a predetermined duration to the first and second electrodes, so as to generate a sustain discharge between the first and second electrodes; and

changing ~~potential of~~ the second voltage applied to the third electrode in the sustain step during the duration of the first voltage applied to the first electrode so as to shift a discharge path of the sustain discharge closer to the third electrode in comparison to when the ~~potential~~ second voltage is not changed.

79. (Currently Amended) A drive method for a plasma display device having a panel unit with a first electrode, a second electrode, and a third electrode, the third electrode intersecting the first and second electrodes to define a discharge cell, ~~the steps of the method~~ comprising:

applying in a sustain step a second voltage of a predetermined duration to the third electrode and a first voltage of a predetermined duration to the first and second electrodes, so as to generate a sustain discharge between the first and second electrodes; and

changing ~~potential of~~ the second voltage applied to the third electrode in the sustain step during the duration of the first voltage applied to the first electrode so as to lengthen

a discharge path of the sustain discharge in comparison to when the ~~potential~~ second voltage is not changed.